

ABSTRACT OF THE DISCLOSURE

An evaluation mask for evaluating a projection-type exposure apparatus, the mask including at least one diffraction grating pattern for producing a diffracted light of the positive first-order and a diffracted light of negative first-order, diffraction efficiencies of the diffracted lights being different respectively, one of the diffracted lights having a magnitude that is zero, and an image of the at least one diffraction grating pattern being projected onto a test substrate by the projection-type exposure apparatus, and a reference pattern for obtaining a reference image to measure a displacement of the image of the diffraction grating pattern, and an image of the reference pattern being projected onto the test substrate or the image detector by the projection-type exposure apparatus, wherein the images of the diffraction grating pattern and the reference pattern projected onto the test substrate or the image detector are used for evaluating the projection-type exposure apparatus.